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EXAMINER	
BRITTAIN, JAMES R	

ART UNIT	PAPER NUMBER
3677	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/592,095	CASEY, WILLIAM E.	
	Examiner	Art Unit	
	James R. Brittain	3677	MW

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *17-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *17,19,21-23,27 and 30* is/are rejected.

7)☒ Claim(s) *18-20,26,28 and 29* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *23 April 2003* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Allowable Subject Matter

The indicated allowability of claims 17, 19, 21-23, 27 and 30 is withdrawn in view of the newly discovered reference(s) to Gatenby et al. (US 5401011), Uecker et al. (US 4397253), Field (US 3750611), Debus (US 387772), Harken (US 4453486), and Bock (US 2262162). Rejections based on the newly cited reference(s) follow. The inconvenience to applicant is regretted.

Claims 28 and 29 would be allowed if amended to overcome the objections to the claims.

Claims 18, 20, and 24-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and if applicant overcomes the objections to the claims.

Drawing Objections

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 16BB from page 6, line 2; 21A, 21B from page 6, lines 7, 12 and page 7, line 4; 26D from page 6, line 18; and 19 from page 7, line 13 in association with figure 5. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "cover means for retaining said rope between said abutment surface and said first cam surface when said cover means is in a retain position and for permitting engagement and withdrawal of said rope from between said abutment surface and said first cam surface when said cover means is in a release position"

(claim 17, lines 18-22) as applied to the species of claims 24-27, which is specific to the species of figure 7, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. There is no cover shown in figure 7.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification Objections

The specification is objected to because the following reference numerals in the drawings are not found in the specification: 16B in figure 1; 14 in figure 5; and 43A and 43B in figures 8 and 12. The reference to "16B B" on page 6, line 9 as a cover appears to be incorrect and --26B-- is suggested. The use of the expression "a/ rope" (page 2, line 6) is unclear in context as to why the "/" is used and -- a rope-- is suggested. The expression "pooped back" (page 6, line 19) is in non-idiomatic English and requires correction. The expression "19is" (page 9, line 6) lacks the proper spacing. Reference numeral 53 refers to two very different structures on page 9, lines 2 and 5, first a spindle and second the "tail" end of the cover, and is a source of confusion and requires change because the same reference numeral cannot refer to two very different structures. Applicant repeatedly misuses periods by either not providing them at the end of sentences (as found on page 3, line 4 and page 6, line 13), the use of a period when none is appropriate (as found on page 2, line 7 for "U.S.,."; page 4, lines 18, 19 and page 5, line 2 for "Fig. 1." or "fig. 1."; page 8, line 3 for "24.") or the use of double periods when only one is appropriate (as found on page 7, line 1 at the end of a sentence. Appropriate correction is required.

Claim Objections

Claims 18-20, 26, 28, and 29 are objected to because of the following informalities: The following terms lack clear antecedent basis: "said ... abutment" (claim 18, line 6); "said cover" (claim 19, line 5); "said abutment" (claim 20, lines 5 and 8, second occurrence); and "said cleat" (claim 28, lines 18 and 29) and in the last instance it is suggested that applicant begin claim 28 with the preamble "A rope cleat comprising:" and then change "A base" to "a base". Claim 26 must begin with a capital letter. In regard to claim 29, the term "and" (line 2) is unclear in context, --when-- (line 3) is misspelled, "isrestrained" (line 4) is improper and --surface-- (line 5) is misspelled Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. §103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 17, 19, 21 and 27 are rejected under 35 U.S.C. §103(a) as being unpatentable over Gatenby et al. (US 5401011) in view of Uecker, deceased et al. (US 4397253).

Gatenby et al. (figures 1-3, 5) teaches tool structure for a strap or a V-belt inherently functioning as a cleat comprising a base 1 having a flat base surface; an abutment means inherently capable of cooperating with a rope for gripping a rope mounted on the base surface and having an abutment surface 14 perpendicular to the base surface; a first spindle 7 having one end mounted on the base surface and extending perpendicularly away from the base surface a first cam 3 rotatably mounted on the first spindle; the first cam having a first cam surface perpendicular to the base surface and convex toward the abutment surface; the first cam operably

arranged to inherently permit positioning a rope between the first cam surface and the abutment surface; a cover means 2 for retaining a rope between the abutment surface and the first cam surface when the cover means is in a retain position and for permitting engagement and withdrawal of a rope from between the abutment surface and the first cam surface when the cover means is in a release position. The device is inherently capable of securing a rope if so desired. The difference is that Gatenby et al. do not indicated that the device is configured so that when tension is applied to the rope in one direction, the rope is seized between the first cam surface and abutment surface by the first cam rotating toward the abutment means and when tension is applied to the rope in an opposite direction, the rope is released from between the first cam surface and abutment surface permitting withdrawal of the rope. However, Uecker, deceased et al. (figures 1a-1c) teaches that it is commonly known that cleats function by tension in one direction seizing the rope and that release is achieved by tensioning the rope in the opposite direction (col. 1, lines 38-44) thereby permitting quicker gripping and release. As it would be advantageous to more rapidly operate the clamp of Gatenby et al. so that gripping and release is more quickly achieved, it would have been obvious to modify the clamp of Gatenby et al. such that the cam is configured so that when tension is applied to the rope in one direction, the rope is seized between the first cam surface and abutment surface by the first cam rotating toward the abutment means and when tension is applied to the rope in an opposite direction, the rope is released from between the first cam surface and abutment surface permitting withdrawal of the rope in view of Uecker, deceased et al. (figures 1a-1c) teaching that it is commonly known that cleats function by tension in one direction seizing the rope and that release is achieved by tensioning the rope in the opposite direction (col. 1, lines 38-44) to thereby provide quicker

function to the clamp. As to claim 19, the cover 2 is mounted to the other end of the spindle 7. In regard to claim 21, Uecker, deceased et al. teaches that the rapid attachment and quick release of cleats is commonly achieved by using spring-biased cams (col. 1, lines 22-23). As to claim 27, Gatenby et al. suggests that it is common to have a second cam 3 mounted on a second spindle 6 so as to engage an opposite second abutment surface so as to engage the opposite end of a looped element.

Claims 17, 19, and 21 are rejected under 35 U.S.C. §103(a) as being unpatentable over Debus (US 387772) in view of Harken (US 4453486).

Debus (figures 4, 5) teaches cleat structure comprising a base, g, having a flat base surface; an abutment means inherently capable of cooperating with a rope for gripping a rope mounted on the base surface and having an abutment surface, g^1, perpendicular to the base surface; a first spindle in the form of a bolt having one end mounted on the base surface and extending perpendicularly away from the base surface a first cam, J, rotatably mounted on the first spindle; the first cam having a first cam surface perpendicular to the base surface and convex toward the abutment surface; the first cam operably arranged to permit positioning a rope between the first cam surface and the abutment surface; a cover means, g^3, for retaining a rope between the abutment surface and the first cam surface when the cover means is in a retain position and for permitting engagement and withdrawal of a rope from between the abutment surface and the first cam surface when the cover means is in a release position. The difference is that Debus does not indicated that the device is configured so that when tension is applied to the rope in one direction, the rope is seized between the first cam surface and abutment surface by the first cam rotating toward the abutment means and when tension is applied to the rope in an

opposite direction, the rope is released from between the first cam surface and abutment surface permitting withdrawal of the rope. However, Harken. (figures 1, 3, 10, 11) teaches that it is commonly known that cleats function by tension in one direction seizing the rope and that release is achieved by tensioning the rope in the opposite direction (col. 3, lines 27-34) thereby permitting quicker gripping and release. As it would be advantageous to more rapidly operate the clamp of Debus so that gripping and release is more quickly achieved, it would have been obvious to modify the clamp of Debus such that the cam is configured so that when tension is applied to the rope in one direction, the rope is seized between the first cam surface and abutment surface by the first cam rotating toward the abutment means and when tension is applied to the rope in an opposite direction, the rope is released from between the first cam surface and abutment surface permitting withdrawal of the rope in view of Harken teaching that it is commonly known that cleats function by tension in one direction seizing the rope and that release is achieved by tensioning the rope in the opposite direction (col. 3, lines 27-34) to thereby provide quicker function to the clamp. As to claim 19, the cover, g^3, is mounted to the abutment means, g^1. In regard to claim 21, Harken teaches that the rapid attachment and quick release of cleats is commonly achieved by using spring-biased cams wherein springs 66 provide the bias.

Claims 22 and 23 are rejected under 35 U.S.C. §103(a) as being unpatentable over Gatenby et al. (US 5401011) in view of Uecker, deceased et al. (US 4397253) as applied to claim 21 above, and further in view of Field (US 3750611).

Further modification of the clamp of Gatenby et al. such that the spring-biased cam suggested by Uecker, deceased et al. is provided by a torsion spring with one end secured to the spindle and the other engaging the cam would have been obvious in view of Field (figures 1, 2)

teaching cleat structure with torsion spring 38 engaging the cam and secured to the spindle so as to provide a biasing force that is functional in a harsh environment.

Claims 22 and 23 are rejected under 35 U.S.C. §103(a) as being unpatentable over Debus (US 387772) in view of Harken (US 4453486) as applied to claim 21 above, and further in view of Field (US 3750611).

Further modification of the clamp of Debus such that the spring-biased cam suggested by Harken is provided by a torsion spring with one end secured to the spindle and the other engaging the cam would have been obvious in view of Field (figures 1, 2) teaching cleat structure with torsion spring 38 engaging the cam and secured to the spindle so as to provide a biasing force that is functional in a harsh environment.

Claim 30 is rejected under 35 U.S.C. §103(a) as being unpatentable over Bock (US 2262162) in view of Uecker, deceased et al. (US 4397253).

Bock (figures 1-4) teaches tool structure for a wire inherently functioning as a cleat comprising a base 10 having a flat base surface; the structure inherently capable of cooperating with a cylindrical rope rather than a cylindrical wire for gripping a rope mounted on the base surface and having first and second spindles 13 having one end mounted on the base surface and extending perpendicularly away from the base surface; first and second cams 12 rotatably mounted on the first and second spindles; the cams having cam surfaces perpendicular to the base surface and convex toward each other; the cams operably arranged to inherently permit positioning a rope between the first cam surface and the second cam surface; and a cover means 21 for retaining a rope between the cam surfaces when the cover means is in a retain position and for permitting engagement and withdrawal of a rope from between the cam surfaces when the

cover means is in a release position. The device is inherently capable of securing a rope if so desired. The difference is that Bock does not indicated that the device is configured so that when tension is applied to a rope in one direction, a rope is seized between the cam surfaces by the first cam rotating toward the second cam and when tension is applied to a rope in an opposite direction, a rope is released from between the cam surfaces permitting withdrawal of a rope. However, Uecker, deceased et al. (figures 1a-1c) teaches that it is commonly known that cleats function by tension in one direction seizing the rope and that release is achieved by tensioning the rope in the opposite direction (col. 1, lines 38-44) thereby permitting quicker gripping and release. As it would be advantageous to more rapidly operate the clamp of Bock so that gripping and release is more quickly achieved, it would have been obvious to modify the clamp of Bock such that the cams are configured so that when tension is applied to the a rope in one direction, the rope is seized between the cam surfaces by the first cam rotating toward the second cam and when tension is applied to the rope in an opposite direction, the rope is released from between the first cam surface and second cam surface permitting withdrawal of the rope in view of Uecker, deceased et al. (figures 1a-1c) teaching that it is commonly known that cleats function by tension in one direction seizing the rope and that release is achieved by tensioning the rope in the opposite direction (col. 1, lines 38-44) to thereby provide quicker function to the clamp.

Conclusion

The patent of Cherpitel (US 5860493, figures 7a, 15, 16) teaches pertinent rope clamp structure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James R. Brittain whose telephone number is 703-308-2222. The examiner can normally be reached on M, W & F 5:30-1:30, T 5:30-2:00 & TH 5:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on 703-306-4115. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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JRB